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EXAMINER	
TURNER, KATHERINE ANN	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/791,854	HAN ET AL.	
	Examiner	Art Unit	
	Katherine Turner	1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 October 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-15,19-27 and 31-37* is/are pending in the application.

4a) Of the above claim(s) *9-11,24,25,36 and 37* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-8,12-15,19-23,26,27 and 31-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/11/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The amendment filed October 8, 2008 has been entered. Claims 1, 4-15, 19-27 and 31-37 are pending. Claims 1, 4-7, 10-15, 19, 21-22, 25-27, 31, 33-34 and 37 are amended. Claims 9-11, 24-25 and 36-37 are withdrawn. Claims 2-3, 16-18 and 28-30 are cancelled.

2. The text of those sections of Title 35, U.S.C. code not included in this action can be found in the prior Office Action issued on July 8, 2008

Drawings

3. The objections to the drawings are withdrawn in light of amendment and arguments.

Specification

4. The objection to the disclosure is withdrawn in light of amendment.

Claim Rejections - 35 USC § 112

5. The claim rejections under 35 U.S.C. 112, second paragraph, on claims 1, 2, 12, 13, 14, 16, 17, 26, 28 and 29 are withdrawn, because claims 1, 12, 13, 14 and 26 have been amended, and claims 2, 16, 17, 28 and 29 have been cancelled.

Claim Rejections - 35 USC § 103

6. The claim rejections under 35 U.S.C. 103(a) as being unpatentable over Osamu et al. (JP 2000-208130) and Pfeiffer (DE 3339933) on claims 1, 2, and 8 are withdrawn, because independent claim 1 has been amended, claim 2 has been cancelled, and because Applicant's arguments are persuasive.

7. The claim rejections under 35 U.S.C. 103(a) as being unpatentable over Osamu et al. (JP 2000-208130), Pfeiffer (DE 3339933), and Uba (US 4,421,832) on claims 4-6 are withdrawn, because independent claim 1 has been amended, and because Applicant's arguments are persuasive.

8. The claim rejections under 35 U.S.C. 103(a) as being unpatentable over Osamu et al. (JP 2000-208130), Pfeiffer (DE 3339933), Uba (US 4,421,832), and Planchat (US 4,735,630) on claim 7 is withdrawn, because independent claim 1 has been amended, and because Applicant's arguments are persuasive.

9. The claim rejections under 35 U.S.C. 103(a) as being unpatentable over Osamu et al. (JP 2000-208130), Pfeiffer (DE 3339933), Uba (US 4,421,832), Planchat (US 4,735,630), and Masumoto et al. (WO/2003/003485) on claims 12-13 are withdrawn, because independent claim 1 has been amended, and because Applicant's arguments are persuasive.

10. The claim rejections under 35 U.S.C. 103(a) as being unpatentable over Osamu et al. (JP 2000-208130) and Masumoto et al. (WO/2003/003485) on claims 14 and 26 are withdrawn, because independent claim 14 has been amended.

11. The claim rejections under 35 U.S.C. 103(a) as being unpatentable over Osamu et al. (JP 2000-208130), Masumoto et al. (WO/2003/003485), and Yamahira et al. (US 2002/0012829) on claim 15 is withdrawn, because independent claim 14 has been amended.

12. The claim rejections under 35 U.S.C. 103(a) as being unpatentable over Osamu et al. (JP 2000-208130), Masumoto et al. (WO/2003/003485), Yamahira et al. (US 2002/0012829), and Uba (US 4,421,832) on claims 16-17 and 19-21 are withdrawn, because independent claim 14 has been amended.

13. The claim rejections under 35 U.S.C. 103(a) as being unpatentable over Osamu et al. (JP 2000-208130), Masumoto et al. (WO/2003/003485), Yamahira et al. (US 2002/0012829), Uba (US 4,421,832), and Planchat (US 4,735,630) on claim 22 is withdrawn, because independent claim 14 has been amended.

14. The claim rejections under 35 U.S.C. 103(a) as being unpatentable over Osamu et al. (JP 2000-208130), Masumoto et al. (WO/2003/003485), Yamahira et al. (US 2002/0012829), Uba (US 4,421,832), Planchat (US 4,735,630), and Pfeiffer (DE

3339933) on claim 23 is withdrawn, because independent claim 14 has been amended, and because Applicant's arguments are persuasive.

15. The claim rejections under 35 U.S.C. 103(a) as being unpatentable over Osamu et al. (JP 2000-208130) and Yamahira et al. (US 2002/0012829) on claim 27 is withdrawn, because independent claim 27 has been amended.

16. The claim rejections under 35 U.S.C. 103(a) as being unpatentable over Osamu et al. (JP 2000-208130), Yamahira et al. (US 2002/0012829), and Uba (US 4,421,832) on claims 28-33 are withdrawn, because independent claim 27 has been amended.

17. The claim rejections under 35 U.S.C. 103(a) as being unpatentable over Osamu et al. (JP 2000-208130), Yamahira et al. (US 2002/0012829), Uba (US 4,421,832), and Planchat (US 4,735,630) on claim 34 is withdrawn, because independent claim 27 has been amended.

18. The claim rejections under 35 U.S.C. 103(a) as being unpatentable over Osamu et al. (JP 2000-208130), Yamahira et al. (US 2002/0012829), Uba (US 4,421,832), Planchat (US 4,735,630), and Pfeiffer (DE 3339933) on claim 35 is withdrawn, because independent claim 27 has been amended, and because Applicant's arguments are persuasive.

19. Claims 1 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al. (JP 2000-208130, refer to IPDL JPO machine translation for citation) in view of Kono et al. (JP 2001-273884, refer to IPDL JPO machine translation for citation).

As to claims 1 and 8, Osamu et al. discloses a secondary battery (paragraph 13) comprising:

- an electrode body (2) (Applicant's unit) having a positive electrode sheet and a negative electrode sheet (Applicant's first and second electrode plates), a separator interposed therebetween, and two electric conduction tabs (4 and 5) (Applicant's first and second electrode tabs) respectively drawn upward (Applicant's extending from) the positive electrode sheet and the negative electrode sheet (Applicant's first and second electrode plates) (drawing 2; paragraph 13);
- a cell case (1) (Applicant's can) adapted to accommodate the electrode unit and electrolysis solution (Applicant's electrolytic solution); and
- a lid (6) (Applicant's cap plate) adapted to seal the can (paragraph 2, lines 1-2) and having an injection hole (14) for electrolysis solutions (Applicant's electrolytic solution inlet), the first surface of the lid (6) and the second surface of the lid (6) opposite to and being space apart from the electrode body (2) (drawing 2; paragraph 15).

Osamu et al. is silent as to the injection hole (14) for electrolysis solutions (Applicant's electrolytic solution inlet) having an area on one surface of the cap plate

different from that on another surface of the cap plate or the injection hole having a sloping cross section.

Kono et al. teaches inclined parts (Applicant's sloping cross-section) (31-32 and 61-64) in the top of the battery package (37 and 67), which incline out forming the lower opening of the pouring-in and exhaust port (9) for the electrolysis solution (drawings 3 and 6; paragraphs 28 and 31). Kono et al. teaches that the inclined parts provide smooth pouring-in of the electrolysis solution, while allowing the gases inside the battery package prior to pouring in of electrolysis solution to be emitted efficiently (paragraphs 12, 28, and 31). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide inclined parts (Applicant's sloping cross-section) in the bottom opening of Osamu et al.'s injection hole (14) for electrolysis solution, because Kono et al. teaches that the inclined parts provide smooth pouring-in of the electrolysis solution, while allowing the gases inside the battery package prior to pouring in of electrolysis solution to be emitted efficiently (paragraphs 12, 28, and 31).

20. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al. (JP 2000-208130), Kono et al. (JP 2001-273884) as applied to claims 1 and 8 above, and further in view of Uba (US 4,421,832).

Regarding claims 4-6, Osamu et al. is silent as to further comprising a channel.

Uba teaches channels (36'), which are similar channels to the channels (36) on the bottom of the jar, adapted to facilitate injection of an electrolyte (Applicant's electrolytic solution) in the neighborhood of the central vent opening (42) whereby

electrolyte is delivered (Applicant's electrolytic solution inlet). One end of the channels (36') extends from (Applicant's is integrated and connected to) the central vent opening (42) whereby electrolyte is delivered (Applicant's electrolytic solution inlet). The channels (36') are linearly shaped and arranged radially in the neighborhood of the central vent opening (42') whereby electrolyte is delivered (Applicant's electrolytic solution inlet) (figures 4 and 6; column 3, lines 51-60). Uba teaches that because of these channels the electrolyte is distributed uniformly to the cell (column 3, lines 35-39 and lines 56-60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Uba's channels with the injection hole (14) of Osamu modified by Kono et al. for electrolysis solutions (Applicant's electrolytic solution inlet), because Uba teaches that these channels cause the electrolyte to be distributed uniformly to the cell (column 3, lines 56-60).

21. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al. (JP 2000-208130), Kono et al. (JP 2001-273884), and Uba (US 4,421,832) as applied to claims 1, 4-6 and 8 above, and further in view of Planchat (US 4,735,630).

Osamu et al. in view of Kono et al. and Uba teaches an injection hole (14) for electrolysis solutions (Applicant's electrolytic solution inlet) with Uba's channels (36'). Uba teaches that these channels are 1/8 inch, which is 3 mm (column 5, lines 28-30).

Planchat teaches channels (31 and 34) used to disperse electrolyte from an electrolyte inlet orifice (30) (Applicant's electrolytic solution inlet) are 0.2 to 0.3 mm in depth, which falls within Applicant's range of 0.1 to 0.5 mm (figure 3; column 3, lines 28-

39). Planchat teaches that the shapes and depths of the channels are chosen in order to obtain a uniform flowrate, and that the configuration having channels at this depth ensures that electrolyte is uniformly distributed (column 3, lines 14-45). It would have been obvious to one of ordinary skill in the art at the time the invention was made for to have the depth of channels of Osamu et al. as modified by Kono et al. and Uba to be 0.2 to 0.3 mm, because Planchat teaches that the depths of the channels are chosen in order to obtain a uniform flowrate, and that the configuration having channels at this depth ensures that electrolyte is uniformly distributed (column 3, lines 14-45).

22. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al. (JP 2000-208130), Kono et al. (JP 2001-273884), Uba (US 4,421,832), and Planchat (US 4,735,630) as applied to claims 1 and 4-8 above, and further in view of Masumoto et al. (WO/2003/003485, refer to English equivalent US 2003/0180582 for cited information).

Regarding claim 12, Osamu et al. discloses the electric conduction tab (5) (Applicant's first electrode tab) being electrically connected to the negative pole output terminal (9) (Applicant's terminal pin). The electrical connection is the electric conduction tab (5) (Applicant's first electrode tab) being welded to the pressure plate (10), which is attached to the negative pole output terminal (9) (Applicant's terminal pin) (drawings 1-2; paragraphs 18-19). The negative pole output terminal (9) (Applicant's terminal pin) is physically connected to the lid (6) (Applicant's cap plate) and electrically insulated from the lid (6) with electric insulating plate (11) and gasket (8) (drawing 1;

paragraph 18). The electric conduction tab (4) (Applicant's second electrode tab) is welded to the inner surface of the lid (6) (Applicant's cap plate) (drawing 2; paragraph 19) at a position in between the injection hole (14) for electrolysis solutions (Applicant's electrolytic solution inlet) and the negative pole output terminal (9) (Applicant's terminal pin) (drawing 2).

Osamu et al. is silent as to the electric conduction tab (4) (Applicant's second electrode tab) being welded to the lid (6) (Applicant's cap plate) at a first position and the negative pole output terminal (9) (Applicant's terminal pin) being disposed between an electrolytic solution inlet and the electric conduction tab (4) (Applicant's second electrode tab and first position).

Masumoto et al. teaches a positive lead plate (4) (Applicant's second electrode tab) being soldered (Applicant's welded) to the sealing plate (23) (Applicant's cap plate) at a first position and the negative electrode rivet (25) (Applicant's terminal pin) being disposed between the electrolyte injection hole (filled with plug 27) (Applicant's electrolytic solution inlet) and the positive lead plate (4) (Applicant's second electrode tab and first position) (figures 2B and 11A; paragraphs 64 and 77). It would have been obvious to one of ordinary skill in the art at the time the invention was made to rearrange Osamu et al.'s electric conduction tab (4) (Applicant's second electrode tab) to the arrangement of Masumoto et al.'s positive lead plate (4) (Applicant's second electrode tab), with Osamu et al.'s electric conduction tab (4) (Applicant's second electrode tab) being welded to the lid (6) (Applicant's cap plate) at a first position and the negative pole output terminal (9) (Applicant's terminal pin) being disposed between

the electrolytic solution inlet (Applicant's electrolytic solution inlet) and the first position, because Masumoto et al. teaches that it is a known arrangement in the art, and since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. See MPEP 2144.

Regarding claim 13, Osamu et al. discloses a cleavage vent (13) (Applicant safety vent) arranged at a position opposite to the negative pole output terminal (9) (Applicant's terminal pin), and the cleavage vent (13) (Applicant safety vent) being adapted to rupture when the internal pressure of the sealed case (Applicant's can) exceeds constant value (Applicant's increases to a level greater than a predetermined allowed level) (drawing 2; paragraph 15). Osamu et al. is silent as to the cleavage vent (13) (Applicant safety vent) being arranged at a position opposite to the negative pole output terminal (9) (Applicant's terminal pin) with respect to the electric conduction tab (4) (Applicant's second electrode tab) of the lid (6) (Applicant's cap plate).

Masumoto et al. teaches a vent hole (20a) (Applicant's safety vent) being arranged at a second position, the positive lead plate (4) (Applicant's second electrode tab) being disposed between the negative electrode rivet (25) (Applicant's terminal pin) and the second position (figures 2B and 11A; paragraphs 64, 72, and 77). It would have been obvious to one of ordinary skill in the art at the time the invention was made to rearrange Osamu et al.'s electric conduction tab (4) (Applicant's second electrode tab) to the arrangement of Masumoto et al.'s positive lead plate (4) (Applicant's second electrode tab), with Osamu et al.'s cleavage vent (13) (Applicant safety vent) being arranged at a second, the position opposite to the electric conduction tab (4)

(Applicant's second electrode tab) being disposed between the negative pole output terminal (9) (Applicant's terminal pin) and the second position, because Masumoto et al. teaches that it is a known arrangement in the art, and since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. See MPEP 2144.

23. Claims 14, 23, 26-27 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al. (JP 2000-208130), Kono et al. (JP 2001-273884), and Masumoto et al. (WO/2003/003485), as applied to 1, 4-8, and 12-13 above.

Osamu et al., Kono et al. and Masumoto et al. teaches the secondary battery of claims 14, 23, 26-27 and 35, as discussed in paragraphs 19 and 22 above.

As to claims 14, 23, 27 and 35, Osamu et al. discloses a secondary battery (paragraph 13) comprising:

- an electrode body (2) (Applicant's unit) having a positive electrode sheet and a negative electrode sheet (Applicant's first and second electrode plates), a separator interposed therebetween, and two electric conduction tabs (4 and 5) (Applicant's first and second electrode tabs) respectively drawn upward (Applicant's extending from) the positive electrode sheet and the negative electrode sheet (Applicant's first and second electrode plates) (drawing 2; paragraph 13);
- a cell case (1) (Applicant's can) adapted to encase the electrode body (2) and electrolysis solution (Applicant's electrolytic solution);

- a lid (6) (Applicant's cap plate) adapted to seal the can (paragraph 2, lines 1-2);
- a negative pole output terminal (9) (Applicant's terminal pin) being electrically connected to the an electric conduction tab (5) (Applicant's first electrode tab) and physically connected to the lid (6) (Applicant's cap plate) and electrically insulated from the lid (6) with electric insulating plate (11) and gasket (8) (drawings 1-2; paragraphs 18-19);
- an electric insulating plate (11) is provided on a second surface of the lid (6) (Applicant's cap plate) and extending in a direction along which the lid (6) (Applicant's cap plate) and arranged to insulate the negative pole output terminal (9) (Applicant's terminal pin) from the lid (6) (Applicant's cap plate) (drawings 1-2; paragraph 18);
- the electric conduction tab (4) (Applicant's second electrode tab) is welded to the inner surface of the lid (6) (Applicant's cap plate) (drawing 2; paragraph 19) at a position in between the injection hole (14) for electrolysis solutions (Applicant's electrolytic solution inlet) and the negative pole output terminal (9) (Applicant's terminal pin) (drawing 2),
- and having an injection hole (14) for electrolysis solutions (Applicant's electrolytic solution inlet), the first surface of the lid (6) and the second surface of the lid (6) opposite to and being space apart from the electrode body (2) (drawing 2; paragraph 15).

Osamu et al. is silent as to the injection hole (14) for electrolysis solutions (Applicant's electrolytic solution inlet) having an area on one surface of the cap plate

different from that on another surface of the cap plate or the injection hole having a sloping cross section.

Kono et al. teaches inclined parts (Applicant's sloping cross-section) (31-32 and 61-64) in the top of the battery package (37 and 67), which incline out forming the lower opening of the pouring-in and exhaust port (9) for the electrolysis solution (drawings 3 and 6; paragraphs 28 and 31). Kono et al. teaches that the inclined parts provide smooth pouring-in of the electrolysis solution, while allowing the gases inside the battery package prior to pouring in of electrolysis solution to be emitted efficiently (paragraphs 12, 28, and 31). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide inclined parts (Applicant's sloping cross-section) in the bottom opening of Osamu et al.'s injection hole (14) for electrolysis solution, because Kono et al. teaches that the inclined parts provide smooth pouring-in of the electrolysis solution, while allowing the gases inside the battery package prior to pouring in of electrolysis solution to be emitted efficiently (paragraphs 12, 28, and 31).

Osamu et al. is silent as to the negative pole output terminal (9) (Applicant's terminal pin) being disposed between an electrolytic solution inlet and the electric conduction tab (4) (Applicant's second electrode tab).

Masumoto et al. teaches a positive lead plate (4) (Applicant's second electrode tab) being soldered (Applicant's welded) to the sealing plate (23) (Applicant's cap plate) at a first position and the negative electrode rivet (25) (Applicant's terminal pin) being disposed between the electrolyte injection hole (filled with plug 27) (Applicant's electrolytic solution inlet) and the positive lead plate (4) (Applicant's second electrode

tab) (figures 2B and 11A; paragraphs 64 and 77). It would have been obvious to one of ordinary skill in the art at the time the invention was made to rearrange Osamu et al.'s electric conduction tab (4) (Applicant's second electrode tab) to the arrangement of Masumoto et al.'s positive lead plate (4) (Applicant's second electrode tab), with Osamu et al.'s electric conduction tab (4) (Applicant's second electrode tab) being welded to the lid (6) (Applicant's cap plate) at a first position and the negative pole output terminal (9) (Applicant's terminal pin) being disposed between the electrolytic solution inlet (Applicant's electrolytic solution inlet) and the electric conduction tab (4) (Applicant's second electrode tab), because Masumoto et al. teaches that it is a known arrangement in the art, and since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. See MPEP 2144.

Regarding claim 26, Osamu et al. discloses a cleavage vent (13) (Applicant safety vent) arranged at a position opposite to the negative pole output terminal (9) (Applicant's terminal pin), and the cleavage vent (13) (Applicant safety vent) being adapted to rupture when the internal pressure of the sealed case (Applicant's can) exceeds constant value (Applicant's increases to a level greater than a predetermined allowed level) (drawing 2; paragraph 15).

Osamu et al. is silent as to the cleavage vent (13) (Applicant safety vent) being arranged at a position opposite to the negative pole output terminal (9) (Applicant's terminal pin) with respect to the electric conduction tab (4) (Applicant's second electrode tab) of the lid (6) (Applicant's cap plate).

Masumoto et al. teaches a vent hole (20a) (Applicant's safety vent) being arranged at a second position, the positive lead plate (4) (Applicant's second electrode tab) being disposed between the negative electrode rivet (25) (Applicant's terminal pin) and the second position (figures 2B and 11A; paragraphs 64, 72, and 77). It would have been obvious to one of ordinary skill in the art at the time the invention was made to rearrange Osamu et al.'s electric conduction tab (4) (Applicant's second electrode tab) to the arrangement of Masumoto et al.'s positive lead plate (4) (Applicant's second electrode tab), with Osamu et al.'s cleavage vent (13) (Applicant safety vent) being arranged at a second, the position opposite to the electric conduction tab (4) (Applicant's second electrode tab) being disposed between the negative pole output terminal (9) (Applicant's terminal pin) and the second position, because Masumoto et al. teaches that it is a known arrangement in the art, and since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. See MPEP 2144.

24. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al. (JP 2000-208130), Kono et al. (JP 2001-273884), and Masumoto et al. (WO/2003/003485) as applied to claims 1, 4-8, 12-13, 14, 23, 26-27 and 35 above, and further in view of Yamahira et al. (US 2002/0012829).

Osamu et al. discloses an electric insulating plate (11) is provided on an inner surface of the lid (6) (Applicant's cap plate) and extending in one direction of the lid (6) (Applicant's cap plate) (drawings 1-2; paragraph 18), but is silent as to the injection hole

(14) for electrolysis solutions (Applicant's electrolytic solution inlet) arranged to overlap the electric insulating plate (11), and an injection hole corresponding to the injection hole (14) for electrolysis solutions (Applicant's electrolytic solution inlet) arranged in the electric insulating plate (11).

Yamahira et al. teaches a solution injection port (45) (Applicant's electrolytic solution inlet) arranged to overlap the gasket (43) (Applicant's insulating plate), and an injection hole corresponding to the solution injection port (45) (Applicant's electrolytic solution inlet) arranged in the gasket (43) (Applicant's insulating plate) (figure12; paragraphs 57-59). Yamahira et al. teaches that this overlapping is done in order to provide a step aimed at assuring sufficient resistance against the force applied at the time of welding the solution injection port (45) (Applicant's electrolytic solution inlet) (figure12; paragraph 59).

Osamu et al. also discloses that the injection hole (14) for electrolysis solutions (Applicant's electrolytic solution inlet) is welded (paragraph 15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to extend Osamu et al.'s electric insulating plate in the direction of Osamu et al.'s injection hole (14) for electrolysis solutions (Applicant's electrolytic solution inlet) in order to utilize Yamahira et al.'s gasket (43) (Applicant's insulating plate) setup which overlaps the solution injection port (45) (Applicant's electrolytic solution inlet) with a corresponding injection hole at Osamu et al.'s injection hole (14) for electrolysis solutions (Applicant's electrolytic solution inlet), because Yamahira et al. teaches that this overlapping is done in order to provide a step aimed at assuring

sufficient resistance against the force applied at the time of welding the solution injection port (45) (Applicant's electrolytic solution inlet) (figure12; paragraph 59).

25. Claims 19-21 and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al. (JP 2000-208130), Kono et al. (JP 2001-273884), Masumoto et al. (WO/2003/003485), and Yamahira et al. (US 2002/0012829) as applied to claims 1, 4-8, 12-13, 14-15, 23, 26-27, and 35 above, and further in view of Uba (US 4,421,832).

Osamu et al., Kono et al., Masumoto et al., Yamahira et al. and Uba teach the secondary battery of claims 19-21 and 31-33 as discussed in paragraph 20 above.

26. Claims 22 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al. (JP 2000-208130), Kono et al. (JP 2001-273884), Masumoto et al. (WO/2003/003485), Yamahira et al. (US 2002/0012829), and Uba (US 4,421,832) as applied to claims 1, 4-8, 12-13, 14-15, 19-21, 23, 26-27, 31-33 and 35 above, and further in view of Planchat (US 4,735,630).

Osamu et al., Kono et al., Masumoto et al., Yamahira et al., Uba, and Planchat teach the secondary battery of claims 22 and 34 as discussed in paragraph 21 above.

Response to Arguments

27. Applicant's arguments with respect to claims 1, 4-8, 12-15, 19-23, 26-27, and 31-35, have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

28. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence/Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine Turner whose telephone number is (571)270-5314. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dah-Wei Yuan can be reached on (571)272-1295. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/K. T./
Examiner, Art Unit 1795

/Dah-Wei D. Yuan/
Supervisory Patent Examiner, Art Unit 1795